

High-Speed Multi-Channel Communications Transceiver with Inter-Channel Interference Filter

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Abstract

A communication system is disclosed that allows high data-rate transmission of data between components. N-bit parallel data is transmitted in K-frequency separated channels on the transmission medium so as to fully take advantage of the overall bandwidth of the transmission medium. Additionally, a cross-channel interference filter in a receiver section corrects for cross-channel interference in the communication system. As a result, a very high data-rate transmission can be accomplished with low data-bit transmission on individual channels. A transmitter system and a receiver system are described for the communication system.